THE

WESTERN

FARMER AND GARDENER,

AND

HORTICULTURAL MAGAZINE.

Edited by { EDW. JAS. HOOPER, a Practical Farmer,
CHAS. W. ELLIOTT, a Practical Horticulturist

Illustrated by Charles Foster

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CINCINNATI:

PUBLISHED BY R. P. BROOKS,

Walnut Street, between Third and Fourth.

1844.

INTRODUCTORY ADDRESS
TO A
COURSE OF LECTURES
ON AGRICULTURE.

Mr. D. SHARWOOD, member of the Royal Agricultural Society of England, &c., will deliver an address on the above subject, on Tuesday, May 7th, at half past 7 o'clock, P. M., at the College Hall. The farmers of Hamilton County are earnestly requested to attend. ☞ Tickets 25 cents each.

CINCINNATI HORTICULTURAL SOCIETY.

This Society holds all its meetings and exhibitions at the Assembly Rooms, Pearl street. The regular weekly meetings are held every Saturday, at 10 o'clock, A. M.

HAMILTON COUNTY AGRICULTURAL SOCIETY.

The officers of this Society will hold a meeting at Mount Healthy, O., on the 18th day of May, on business connected with the interests of the Society.

TO THE PUBLIC.

Four Volumes of the Western Farmer and Gardener, illustrated with numerous Engravings, on Copper and Wood, of all kinds of Stock, Utensils, Fruits, Flowers, &c., for $3.

Persons who are now subscribers to the current [4th] volume of the Western Farmer and Gardener, or who may hereafter become subscribers to it, who may wish to have the work complete from the commencement, are offered the back volumes at the above very low rate—viz: Vols. 1, 2, and 3, neatly put up in paper covers, suitable for carriage by mail, for $2, and Vol. 4 (now publishing) for $1; making a complete set of the work (four volumes) for $3, sent free of postage. ☞ Notes of any specie paying Bank in the United States will be received at par.

We are publishing an edition of the fourth volume with *colored* engravings, of fruits, flowers, &c., for which $1 extra is charged; so that persons wishing the colored edition of the present volume, together with the back volumes, must send us $4. Back volumes, neatly bound, for sale at $1,25 each.

There are a great number of farmers in the whole range of the Mississippi and Ohio valleys, who can well afford this. Send in your orders, *with the cash*, and we call upon every farmer, mechanic, working, and reading man, in the country, to improve this opportunity, not only for their own benefit, but, what is the same thing in the end, the benefit of the whole agricultural cause. What say you, brother farmers? Will you aid in this advantageous measure to all parties concerned—it is for your good as much as ours—give us your aid and countenance, and much advantage will be the result. To Agricultural Societies or Clubs, who may wish to give our volumes as premiums, we will deduct ten per cent. from the above prices on any amount ordered. This mode of awarding agricultural magazines as premiums, is becoming to be adopted pretty generally in the East; and what better plan can be pursued, to encourage reading and improvement among the cultivators of the soil? Address,

R. P. BROOKS, *Publisher.*

Fisherii and Bicolor Cinerarias.

THE WESTERN FARMER AND GARDENER,
AND HORTICULTURAL MAGAZINE.

Vol. IV.] Cincinnati, May, 1844. [No. X.

The Cinerarias,

Were lent from the green-house of Jacob Hoffner, a gentleman whose taste in these things is now pretty well known and appreciated. We have not, in the colored specimens, been able to keep up to the beautifully brilliant purple of the Fisherii. He has a great variety, which, it is understood, he is gratified in showing to his friends and others. For a list of a few of the best varieties, and directions for their cultivation, see an article in the 8th number of this paper, (page 185,) prepared by his gardener. C. W. E.

Farmers' Clubs, or Conversational Meetings.

In England, as well as in some of the Eastern parts of this country, the farmers have adopted a practice of interchange of communications and ideas, on the subject of their profession, by holding social meetings once a week, or once a month, at some particular place. This method of advancing knowledge and improvement, is one of the most effective that can be adopted. It is obtaining, from the very fountain head, actual practice and experience in matters of the greatest benefit and interest. It is the custom in these societies, for a member to be requested to prepare himself to deliver at the ensuing meeting all the information he possesses, or can obtain, on some given subject or point connected with agricultural science, practice and improvement. At that meeting, when he has finished, others compare their own practice and experience with his, whether coincidental or opposite. This brings other farmers on the floor, who carry out the subject to the best of their knowledge and experience. The results of their meetings are then published in some agricultural or other work, and thus given to the public at large.

Can such a club, of the neighboring farmers, or of those who reside in the city, and have farms under their management, be organized in Cincinnati? If any city in the West should make a beginning in this matter, it should be the one which wears a regal title! If only half a dozen zealous and improving farmers would form an embryo, from which the full fruit might expand, it would effect this desirable object.

Another mode of pushing forward agricultural improvement, would be for some person competent to the undertaking, to give public addresses, either gratis, or at a small charge merely to cover expenses of room, &c. There is now a gentleman in this city, a practical farmer with the highest recommendations, who is travelling through our country for the national agricultural society of England, to make himself acquainted with the state of our agriculture; as Mr. Colman, an eminent agriculturist of America, is now doing in Great Britain. This gentleman will deliver a lecture on general agriculture, one day in each week, while he sojourns amongst us. He will also attempt to form a Farmers' Club in this city, and put us in communication with the great Agricultural Society of England. May God speed his endeavors, say we. E. J. H.

We believe that the Ohio and Mississippi valleys, are destined to become in a comparatively short period, the greatest Fruit growing, as well as Agricultural districts, in the world.—Horticultural societies are rising in many directions around us.

Aphis, or Plant Louse.

A writer in the Albany Cultivator, supposes, the ants who claim the aphides as their cattle, provide shelter for them during the winter, and in the spring convey them up the trees and deposite them on the leaves on which they pasture them. I think this opinion is incorrect. For many years, I have studied the habits of the aphis; and have never met anything to corroborate that writer's supposition. That the ants are fond of the sweet excretion from the aphis, is certain; and they are constantly seen travelling over the backs of the grouped aphides, in search of it; but times unnumbered, I have discovered the young aphides in the swollen *buds* of fruit trees, long before the ants dare venture from their winter abodes.

The history of this insect, the aphis, is peculiarly interesting. There are many species of it. Some are subterranean, and subsist upon the *roots* of plants; and so far as my examinations extend, they are pale colored; while the other class, aerial in their habits, are green, black, or brown colored; conforming, in this particular, to a well known feature of organized being, that the presence or absence of light influences the depth of color of the animal or vegetable surface.

I have often met with the aphides on the roots of Indian corn, wheat, lamb's quarters, (*chenepodium album*,) various grasses and other plants; and there are few who have not seen them on all manner of fruit trees, wild and cultivated—on roses and many other ornamental plants, on cabbage leaves, willows, and gooseberry bushes. There are some plants which I have not seen infected with them; but the number of species of plants, from which they derive subsistence, is by no means limited.

In reference to the care which ants bestow upon the aphides, I will relate the following fact. While searching, some years ago, for objects of natural history in a swampy situation, I descried a number of young willows, studded with unusual masses, like pallets of dirt thrown against the limbs, and adhering. On careful inspection, they were found to be composed of excrementitious matter brought to the spots, and built up into shelters over groups of aphides. I perceived but one place of ingress, and that was on the top; through this (a small orifice) the ants passed to and fro. In this case, I could not perceive the *wisdom* of the ants, whatever may be thought of their ingenuity; for, if the object was to prevent migration, there appeared to be no profit in the imprisonment of the aphides, as, in every instance to which I directed my observation, the insect cattle, for want of fresh pasture, were either starved to death or were perishing of famine, as the shrivelled state of the covered bark and the emaciated appearance of the aphides evinced.

The aphis is *viviporous* during the summer; but, at the close of the season, *eggs* are deposited in appropriate crevices—especially about buds. Here they are early and successively hatched in the spring, and the insects begin to prey upon the bursting buds without delay. It is thus, I believe, that the aphides appear upon the trees, and not by the aid of the ants. J. T. P.

Richmond, Ia.

Hamilton County Agricultural Society.

We feel it our duty to endeavor to impress upon the mind of every member of this comparatively infant body, that, in order to sure and complete success in the object of its formation, it behoves every intelligent part and parcel, constituting the grand whole, to do all he possibly can in his particular sphere of action, to forward the interests in which each has a share. At first, particularly, every society requires all the fostering care that can be bestowed on it. Every member should be a speaker at every fit opportunity, to explain to and urge on others all the sound arguments that can be so justly brought forward in favor of such beneficial associations. Nothing can be done in a great cause without all the

reasons for its promotion being appropriately produced before the public eye, both by private and public persuasion. Of course official members are especially expected to be very active and vigilant in increasing the numbers and attending to the duties. But none of us should, after putting the machinery in motion, fold our arms and merely look on. We are farmers; let us then pay undivided attention to our occupation, and elevate the position of agriculture, and advance this great employment in the sight of the community at large. All other professions have their advocates, and are attended to in regard to their elevation, dignity, and usefulness, by the persons connected with them. Why should the great foundation of society, the agricultural interest, be so neglected, and the drops of water which form the great ocean of its composition and prosperity, be sprinkled merely, as it were, over the earth, instead of being collected together to constitute a great element, to combine in its strength and form a grand reservoir, to receive and dispense fertilizing rains and dews, exhalations and showers, over the world. No! we trust that farmers are now beginning to see their own true interests, and those, too, most providentially combined with that of society; and the time seems approaching, when mere brute force will not alone be said to be the chief part necessary to deal with all nature's laboratory. We look forward, then, to the members of the Hamilton County Agricultural Society doing their part in the links of the great chain, which should unite the whole family of man together in one common bond of interest, affection, and usefulness.

E. J. H.

Benefits of Agricultural Societies.—

The first great question, in all agricultural operations, is this: how shall we obtain the greatest returns for capital and labor? This secret can only be unfolded by repeated trials.

But trials in one country will not always show the truth in another. Very good gold may be found in one country by a process which, in another, will only uncover slate-stones. It is for this reason that we cannot fully profit by the European agriculturists, or even those in our own country a little to the north or south of us. The question, then, arises, how far can we profit by their experience? How many of their practices dare we imitate? How many of their *unsuccessful* experiments may be useful in our locality? and with what variation in the details? If one man must make all the experiments in order to answer these questions, he may not live to know the result, or profit by his labor; and if he could, the benefit of his actual improvements would be confined to his own neighborhood, unless accident should bring them to the knowledge of others. Hence the great advantage of Agricultural Societies. Their benefits are beyond calculation. One has tried one thing, and another has tried another thing, till at last all have been tried. The success or failure, the profit or loss—together with a detail of the proceedings—becomes known by the societies' meetings, or by their publications. It is a general principle, that "Union produces strength." Why should it fail here? It will not fail, unless by neglect. The universal experience of all countries proves, that agricultural societies have raised the standard of farming,—have expanded and liberalized, and in every way improved and elevated the habits and minds of farmers. We should also consider that agriculture is *the greater* interest of the country; that whatever importance may be attached to other pursuits, AGRICULTURE SUPPORTS ALL AND PAYS ALL! How important, then, that its modes of operation be the best. Let it farther be borne in mind, that a society may promote many improvements, at a trifling expense to the members, which would be beyond the means of an individual.

Miss. Valley Farmer.

From the Leeds (Eng.) Mercury.

Wheat Three Thousand Years Old.

Four years ago, a friend of the Earl of Haddington, having occasion to unrol an Egyptian mummy, was surprised to find a few grains of wheat enclosed along with the body, and, having made a present to his Lordship's Countess, of four seeds, it was sent to his Lordship's magnificent seat of Tynningham, in East Lothian, and sown in a favorable spot in the kitchen garden, on the Ist of November, of last year.—Through the kindness of his Lordship's worthy and excellent gardener, Mr. Ford, we have been favored with a sight of the produce of these highly interesting seeds; and, as rather an imperfect account of them

has appeared in a contemporary, we venture to lay before our readers the following brief description of them. Although there may be nearly a hundred stalks ranging in length from nearly five to upwards of six feet, the leaves are broader than usual, and fully an average as to length. The grain is in two rows or triplets, and one or two that we counted contained twenty triplets on a side, or forty on the ear. The ear contains a few barbs or awns on the upper end, and is open and distant between the grains. It flowered nearly a fortnight before any of the varieties sown at the same period in the neighboring fields. A few grains of the modern Egyptian wheat were sown along with it, and certainly no two articles can be more entirely dissimilar. The modern is dwarf, not more than four feet high, closely set, and barbed in every part of the ear; and its general resemblance to its ancient progenitor is not greater than that of barley to wheat. It might be needless to add, that Mr. Ford looks forward to his harvest with infinite anxiety; and it has cost him no little care to protect them from the legions of antiquarian blackbirds which beset it, trying every opening in the netting, with which it is enclosed, seemingly determined, at all risks, to compare the food of the ancient blackbirds in Egypt with that of our modern ones.—*Scotsman.*

The other day, in one of the rooms of the Derby exhibition, we observed growing in flower-pots, several healthy stalks of Egyptian wheat, approaching to maturity. Of the appearance, altogether, of the wheat, we could not supply a better than the preceding description. The seeds from which it was produced are said to be three thousand years old, having been obtained under the same singular circumstances as the above.

With regard to the wheat in this mummy being actually 3,000 years old, we would remark, that the age of the mummy is indefinite. Mummification dates from times anterior to the Pyramids down to the days of St. Augustine, in the fifth century after Christ. The age of this wheat may be only 1,200 years! Egyptian wheat found in the tombs of the 18th dynasty—*i. e.* from B. C. 1822, to B. C. 1476—has *germ*inated when sown in *Germ*any. It is frequently found in the tombs of Egypt, as may be seen on reference to Sir J. G. Wilkinson's "Manners and Customs."

Sticking Peas.—Stretch on sticks at proper distances along the rows, strings of bark or bass matting; the plants will cling to them.

Things to be aimed at on a Farm.

1. To exhibit a considerable ambition to be esteemed a good farmer, to contribute all that can be done to the stock of human happiness, and which may be undertaken with profit to himself and benefit to the community.

2. To make a compost of one part of stable manure and two parts of earth, or other properly decomposed matter; instead of using long manure from the stable, in its green state.

3. To use manure spread and ploughed in, and not to apply it green in the hill—particularly with potatoes; as, by this practice, the crop suffers both in quantity and quality, especially in dry seasons.

4. Where a crop of grain is wanted from land to be laid down in grass, the better plan is to sow grass seed in September, after taking off the grain crop, and ploughing in the stubble. Grass seed should be sown thick; from two to three pecks of timothy and a bushel of red top should be allowed to the acre.

5. All barns should, if possible, be provided with cellars—part for roots and part for manure; and should be made warm and comfortable. This will operate, too, as a saving of food. There should also be water at hand.

6. Improvements should be made on a farm on a good scale, and with liberal outlay, if practicable, instead of laying out surplus funds in buying more land.

7. There should be a systematic course of culture of the land; there should be a plentiful planting of fruit and ornamental trees, and all the small fruits should be in abundance, at least for the useful, insect-destroying birds, if not for market.

8. Deep ploughing, good in general, should be resorted to as a remedy for the washing of the land on hill-sides—it absorbs the water that falls upon the surface.

9. To plant unproductive and waste lands with trees—such as locusts, for posts, &c.

10. Not to be alarmed at scientific, or what are more commonly denoted "book farmers," and "gentlemen farmers;" these are the greatest public benefactors, as their experiments often light upon something exceedingly valuable to the "stand still" farmers, who are often induced by them to move on, and to be improving in their practice.

11. To keep all tools in good order, and in their proper place when done with, and not in the furrow in mid-winter, nor the harrow turned up in a dangerous position against the fence, nor carts and wagons standing out at all times, and hoes, shovels, and dung forks scattered here, there, and everywhere.

12. To take one good agricultural and horticultural paper in the country in which they live first, and then, if they want to extend their knowledge beyond that, the best general paper they can hear of at a distance. To do all this with a view to a progressive improvement, and to learn what is going on in the way of the best culture, kinds and preparation of manures, good and new seeds, first rate varieties of fruits and vegetables, &c., so as to keep up, to the best of their means, with their neighbors and the world at large.

Forming and Preserving Herbariums, or Dried Plants.

Dried plants far surpass either drawings or descriptions, in giving complete ideas of their appearance. When plants are well dried, the original forms and positions of even their smallest parts, though not their colors, may at any time be restored, by dipping them in hot water.

The mode or state in which Plants are preserved, besides drying, is by pressing. The greater part of plants dry easily between the leaves of books, or other paper, the smoother the better. If there be plenty of paper, they dry best without shifting. Some vegetables are so full of life that they will grow between the papers. Destroy their life by dipping them in boiling water. Press all plants by a box or pane, with a bottom of cloth or leather, like a square seive. In this, coarse sand or small shot may be placed in any quantity. Very little pressing is necessary. Sometimes the specimens are glued to the paper, or fastened by cross slips of paper, glued at one end and pinned at the other.

Warming Land.

Mr. Josiah Lovett, of Beverly, who has been remarkably successful in raising various kinds of vegetables, as has appeared by his superior exhibitions at the Horticultural Rooms, in a late No. of the New England Farmer, gives his mode of warming land, by which he gets vegetables almost as early as they are produced in the vicinity of Boston, though the seasor. in Beverly is at least a week later, and Mr. Lovett's land is moist and low.

His method is, to plough or spade, or in working the land in any way, to do it *while the sun shines clear*, and, if possible, from 11 to 4 o'clock. By this means, the warm surface earth is turned under, the cold earth brought up and warmed, and buried in turn. This is repeated two or three times, on warm sunny days. Seeds planted on land thus warmed, a week or ten days later than on land ploughed or spaded but once, will mature their fruit earlier and of a superior size, with the same manuring and attention.

This system is founded upon the true principles of philosophy, as will appear evident tc every person of reflection, and, we doubt not, may be turned to a good practical account. The superior crop, from a more thorough pulverization of the soil, and mixing it well with manure will amply compensate for the extra ploughing.—*Boston Cultivator.*

Spirit of the Agricultural Journals.

Soaking grain in a solution of copperas, before sowing or planting, is the best preventive against the wire worm that has been used.

It is doubtful whether a single flock of Merino sheep, save that of the Hon. Wm. Jarvis, of Vermont, has been preserved pure to the present time, since their importation into this country; unless there was an importation made by Mr. Seth Adams, into Massachusetts, but now of Zanesville, O.

Col. Jaquess (good authority on cattle) says, that he has seen cows that were ruined for milk, by eating too much Indian meal.

The celebrated Morgan horse of the East, attributed by Col. Jaquess to a cross of the Normandy or French horse, is the best breed for all work in the country.

President Quincy kept his whole stock of cows, which formerly required ninety acres of pasture when run at large, on fifteen acres only when shut up and fed with green fodder on the soiling system.

Mr. Munson, an experienced cattle fattener, is convinced that cattle to be fattened should not be moved from pasture to pasture, but kept in one lot where they have a sufficient bite of the daily growth, which is sweeter than any other.

Testimony in favor of the use of salt as a manure very conclusive; but this is too costly for general use.

Rails ought to be split in April or May, when the bark will peel off the trees, and then the sap rails will last as long as the inside heart rails will.

Zinc labels to write on with a common lead pencil. — Durable labels are much wanted. Slightly rub with pumice stone the part upon which you wish to write, then write upon it with a common lead pencil, and when the letters have been exposed to the air for two or three days, they are indellible. Old zinc is preferable to new.

An error in American stock breeding is, an expectation that one description of stock will thrive well in all situations, and under all circumstances.

One of the greatest benefits to be conferred upon the agricultural community, to induce a spirit of improvement amongst the stand-still, illiterate farmers, would be for a practical and scientific farmer to give public lectures, gratis, to be employed by State or other agricultural societies, upon practical and scientific husbandry.

Farmers cannot afford to keep poor cows, or to keep cows poor.

There seems to be very good encouragement at present for the wool growers; in fact, their prospects were never so good.

Charcoal is found to be the most valuable substance for absorbing ammonia from the atmosphere, even more so than gypsum. The English have produced eighty bushels of wheat per acre by its use. If charcoal were saturated with urine, it would be better, because this would give the elements of the grain at once.

Summer or spring wheat should be put in very early, getting its growth before the intense heat of summer comes on, nor is it so liable to fall.

Experience and observation convince us, that to raise fine, serviceable, and quick animals, it can be done by the use, and use only, of *thorough* bred stallions with the best of our country mares and grade mares. The thorough bred horse is possessed of sufficient bone, and that of flinty hardness; muscle of more firmness than that of any other horse; his gait more elastic, with wind and bottom to excel any other breed of horses. ☞ Young Priam we should think a good horse of this description, belonging to Mr. W. W. Cary, of Pleasant Hill, O., and Gray Medoc, near Covington.

Salt cannot, as some persons fancy, make badly cured hay *good*, and well cured hay does not need it. Salt is good in a trough or manger, where cattle can help themselves. Hay should invariably be put up into cocks at 4 o'clock, at which time the dew begins to collect. When thus put up, it cures rapidly in the cock, requires less hauling afterwards, and loses less in weight, than if put up when cold and wet with dew.

Mr. J. R. Barbour, a great silk authority, says, that the valley of the Ohio has gone ahead of New England in the production of raw silk. He thinks that the West and South will take the lead in the growth of silk.

A fine specimen of the horse of Normandy, France, called Dilligence, has been imported into New York State, very valuable for draft, and, crossed with the light mares of the country, would produce a peculiarly active and hardy race of horses, fit for the road or plough.

A good writer on the subject of orchards, in the Albany Cultivator, gives the following desirable list of apples for cultivation; it differs but little from Mr. Elliott's list, published in an article on the orchard, in the eighth number of the Farmer and Gardener:—

Summer Fruit. — Yellow Harvest, Early Sweet Bough, Early Red Juneating, Summer Pearmain, Sine Qua Non, Buffington's Early. *Autumn Fruit.* — Belle Bonne, Strawberry Apple, Summer Queen, Rambo, Autumnal Swaar, Gravestein, Fall Pippin. *Winter Fruit.* — Bellflower, Swaar, Peck's Pleasant, Esopus Spitzenburg, Jonathan, Ortley, R. I. Greening, Ribston Pippin, Roxbury Russet, Tallman Sweeting, Northern Spy.

To those who have but small space, the following are more particularly recommended:

Yellow Harvest, Bough, Sine Qua Non, Strawberry apple, Gravestein, Newtown Pippin, Fall Pippin, Swaar, Baldwin, Spitzenburgh, Jonathan, Northern Spy.

The *Caterpillar*, if not destroyed by cutting off the small shoots which hold the eggs and burning them, are easily destroyed when they hatch by a caustic, or poisonous solution, as of lime, ley, or tobacco, applied to them with a cylindrical brush on a pole.

The *Borer* which enters and perforates the wood of the tree, at or a little below the surface of the earth, may be taken out by introducing into the hole they have made, a flexible barbed wire, or punched to death in their holes by a flexible twig.

The *Canker* is sometimes called the bitter rot. It arises, probably, from neglected culture, poorness or wetness of the soil, or exposed situations; but more particularly, injudicious pruning, and bruises by beating the fruit off. Decay then commences from the wound, and extends

till the tree dies. To prevent it, never prune in the spring, while the sap is in active motion; and protect all wounds of much size from air and moisture, by a coat of paint, or of tar and brick dust. In trees already infested, cut away all affected parts, and apply a suitable covering to the wounds.

A Scotch paper says that onions should always be transplanted. It directs to sow the seed in March, and, when they attain some size, to transplant. Twenty-four onions, that had been treated in this way, weighed sixteen pounds; one measured nearly thirteen inches in circumference, and weighed ten ounces.

Those who wish for neat bedsteads for the ensuing year, should wash them well with boiling water, and then put quicksilver beaten with the whites of eggs in every crack and corner. One white is enough for a bedstead with as much quicksilver as it will receive. It is the only thing that will keep bugs away when the bedstead cannot be often attended to. It is a certain poison to bugs.

Thorough manuring, including turning in of green crops and the plentiful use of clover, deep ploughing, good seeds, timely planting, proper rotation of crops, and much stirring of the ground, and neat culture, would work wonders in our agriculture.

The grape requires a deep friable soil, and an exposure suitable to the kind. No fruit will admit of such plentiful manuring; if properly applied, it will tell greatly in the *fruit*, as well as wood. Decomposed vegetable or animal manures, and above all the blood of cattle from the butcher's stall, plentifully and frequently mingled with the earth at a short distance from the main stock of the vine, will effect astonishing wonders. The American varieties require only such pruning during the winter as to prevent the branches injuring by contact, and the removal of weak and immature spurs. Summer pruning should only be much resorted to when there is not enough room for the vines—much pruning causes the fruit to turn black and fall off, and even cutting off the leaves injures the fruit.

There are few practices more injudicious than that of sowing too small a quantity of grass and grain seed on a given quantity of land. A bushel and a half of wheat, two bushels of oats, two and a half pecks of timothy, and eight to ten quarts of clover, are, in the opinion of good judges, but fair allowances for an acre's seeding. Some soils, and under certain circumstances, however, will admit and require heavier seeding than others; the judgment of the farmer must decide in such cases as to the proper amount. It is the practice of sowing too little seed *generally* of which there is just reason to complain.

One of our subscribers assures us that both he and a friend of his have used fresh cow dung to cure the worm in the peach tree, and they have found it completely successful in destroying it, and bringing the tree to a perfectly healthful condition.

Lamp oil will kill warts on cows' teats, by applying it several days in succession.

In an experiment by Mr. Jno. Botts, Washington, Va., of raising corn by planting two feet apart and nine inches in the row, after soaking the seed well, and then rolling it in plaster and ashes, to give it an early start, and to preserve its color in the driest season, he obtained 100 bushels to the acre. The corn, after it was prepared as above, was not planted till it had sprouted half an inch to an inch in length. In three days it was out of the ground, and could be seen from one end of the row to the other.

Lime has in itself many valuable properties. It gives a suitable degree of heat to cause immediate vegetation; it guards from worms and insects that often destroy one-half of the first planting of corn; it causes an early and rapid growth, that, even if sowed rather late, ripens the grain before the frost appears. It preserves other grain from mildew, as well as having as good an effect on it. For corn, mix one-eighth with old barn manure, to be placed in the hill with the corn. For other grain, sow it broadcast after ploughing, and harrow it in with the grain, one-third to one-half more grain will be the average difference thereby.

Sulphuretted hydrogen which is so often dug up from deep wells, and whose odor resembles a gun barrel which has been fired repeatedly with gun powder, has been found lately to have a very great fertilizing effect on vegetation, as has been seen by earth from wells being spread over poor land.

A gentleman residing near St. Louis has recently commenced the manufacture of oil, of fine quality, from corn. It is said to be equal to sperm or lard oil, without smoke.

To *cure* the peach tree worm, early in the spring, soon after the frost is out of the ground, lay bare the trunk of the tree at the roots; then pour on from two to four gallons of *boiling soapsuds*, which may easily be obtained after washing; taking care so to remove the earth as to retain the boiling suds around the tree; then immediately replace the earth. Perform the same operation again in August; then, to do better still, once a year, *scrub* the *entire trunk* of the *tree* with strong soft soap suds. For a *preventive*, use tan bark, stone coal, powdered charcoal, fresh cow manure, or wood ashes, to be renewed once a year.

Every farmer should sow an acre or two in corn broadcast, about four bushels to the acre, to help feed his stock during winter; they will eat it in preference to the best timothy hay, and eat stalk and all, the stalks not being large when they are cut up, which may be easily done by a strong cutting machine.

(To be continued.)

POA PRATENSIS.

Kentucky Blue Grass—Spear Grass—Meadow Grass.

Grasses of the West.

Agreeably to an intimation once or twice given me in your paper, I now commence a popular description of some of the western grasses. With the aid of an engraving, which I think was proposed by a former editor, the farmer, although unversed in the technicalities of botany, will probably be enabled to designate the different species with ease.

If we consider the earliness, durability, readiness of growth, extensive dissemination, nutritious quality, and, consequently, value as pasture, as proper criterions by which to judge, we will be compelled to place the

POA PRATENSIS,

At the head of our list of valuable grasses. This is the famous *Kentucky blue grass*. It is elsewhere very generally known as *spear grass*; and, perhaps, less commonly as *meadow grass*, and *green grass*, or *green sward*. It appears to be well known in France, Germany, and England.

The culm or stalk of this grass is from one to three feet high, slender, cylindrical, and smooth; bearing, as you perceive in the figure, a branched head of flowers on the summit, and on its sides a few short narrow leaves. But what are called the radical leaves, which start from near the ground, constitute the chief portion of this grass; and form that soft, dark green carpet, which, on rich, moist lands, has excited the admiration of many. These leaves, unlike those on the stalk, are very long and numerous; perhaps the average length, on rich land, is twenty inches. I have measured some from my own ground which were three feet in length! These radical leaves are also narrow, and, in a fertile, humid soil, have a deep bluish green color. The plant has a creeping root, and is one of the best examples of a *social* grass, growing as it does, close to its own kind, and forming a compact mat over the ground. It is seldom, in this country at least, converted into hay; but, by experiments made in England, it appears, when cut "fresh," to equal timothy in the quantity yielded, and to surpass clover; one hundred pounds, when dried, giving forty-four pounds of hay. If cut in "flower," however, it yields but twenty-nine pounds of hay. Indeed, from trials made at the same place in England, the speargrass dries to better profit than timothy *(phleum pratense;)* the latter being found to part with sixty-one per cent. of moisture, instead of fifty-six per cent.

This grass is found upon the hill tops, and in the vales, in the shade, and in the open fields, requiring little or no pains in its introduction; but a good deal in its extermination, when the ground is to be tilled.

The past winter, having been a mild one, I have seen in favorable situations numerous spots throughout that season made green by the *poa pratensis*, and now (3d month, 15th) the ground is quite verdant with its young leaves.

Richmond, Ia. J. T. P.

Remedy for the Curculio.

R. Buchanan, Esq., Pres't. Horticultural Society.

Sir—A neighbor, who is observant in matters of horticulture, informs me, that a successful experiment was tried upon one of his plum trees last year, to prevent the ravages of the Curculio.

An old man, who lived on his premises, in a shop which had a yard with a single plum tree in it, observing that that insect infested the trees very generally, and were in a fair way of destroying the whole crop, and knowing of no preventive—was induced to try the experiment of saturating the bark of the tree for a short distance with spirits of turpentine. He afterwards tied a rag, dipped therein, around it. The experiment succeeded to a charm, for not a plum was afterwards injured, whilst other trees in the vicinity cast from one-half to two-thirds of their fruit from the sting of that pernicious insect.

My object is, to get the members of your Society further to test the efficacy of this experiment, (as we shall do here,) and make the result, if successful, known.

Yours, LEWIS VAIL.

Canton, Stark Co., April 3d, 1844.

Coffee.

Coffee is the seed contained in a berry, the produce of a moderate-sized tree, called the *Coffea Arabica*, and which has also been named *Jasminum Arabicum*. This tree grows erect, with a single stem, to the height of from eight to twelve feet, and has long, undivided, slender branches, bending downwards: these are furnished with evergreen leaves, not unlike those of the bay-tree. The blossoms are white, sitting on short foot-stalks, and resembling the flower of the jasmine. The fruit which succeeds, is a red berry, resembling a cherry, and having a pale, insipid, and somewhat glutinous pulp, enclosing two hard oval seeds, each about the size of an ordinary pea. One side of the seed is convex, while the other is flat, and has a little straight furrow inscribed through its longest dimension; while growing, the flat sides of the seed are towards each other. These seeds are immediately covered by a cartilaginous membrane which has received the name of *the parchment*.

Botanists have enumerated several varieties of this tree as existing in the Eastern and Western Hemispheres. These varieties result from accidents of soil and climate, and must have been produced subsequently to the naturalizing of the plant in America, since it is pretty certainly shown, that all the coffee-trees cultivated there are the progeny of one plant, which so recently as the year 1714 was presented by the magistrates of Amsterdam to Louis XIV. King of France. This plant was placed at Marly under the care of the celebrated Mons. de Jussieu, and it was not until some years after this that plants were conveyed to Surinam, Cayenne, and Martinico. The cultivation must have afterwards spread pretty rapidly through the islands, since in the year 1732 the production of coffee was considered to be of sufficient consequence in Jamaica to call for an act of the legislature in its favor.

The use of coffee as an alimentary infusion was known in Arabia, long before the period just mentioned. All authorities agree in ascribing its introduction to Megalleddin, Mufti of Aden, in Arabia Felix, who had become acquainted with it in Persia, and had recourse to it medicinally when he returned to his own country. The progress which it made was by no means rapid at first, and it was not until the year 1554 that coffee was publicly sold at Constantinople.

Soon after its introduction into the capital of Turkey, the ministers of religion having made it the subject of solemn complaint that the mosques were deserted while the coffee-houses were crowded, these latter were shut by order of the Mufti, who employed the police of the city to prevent any one from drinking coffee. This prohibition it was found impossible to establish, so that the government laid a tax upon the sale of the beverage, which produced a considerable revenue.

The consumption of coffee is exceedingly great in Turkey, and this fact may be in a great measure accounted for by the strict prohibition which the Moslem religion lays against the use of wine and spirituous liquors. So necessary was coffee at one time considered among the people, that the refusal to supply it in a reasonable quantity to a wife, was reckoned among the legal causes for a divorce.

Much uncertainty prevails with respect to the first introduction of coffee into use in the western parts of Europe. The Venetians, who traded much with the Levant, were probably the first to adopt its use. A letter, written in 1615 from Constantinople, by Peter de la Valle, a Venetian, acquaints his cor

respondent with the writer's intention of bringing home to Italy some coffee, which he speaks of as an article unknown in his own country. Thirty years after this, some gentlemen returning from Constantinople to Marseilles, brought with them a supply of this luxury, together with the vessels required for its preparation; but it was not until 1671 that the first house was opened in that city for the sale of the prepared beverage.

Coffee-houses date their origin in London from an earlier period. The first was opened in George Yard, Lombard Street, by one Pasqua, a Greek, who was brought over in 1652 by a Turkey merchant, named Edwards.

The first mention of coffee that occurs in our statute books, is found in the act 12th Car. ii. cap. 24, (in the year 1660,) by which a duty of four-pence per gallon, to be paid by the maker, was imposed upon all coffee made and sold: three years after this, coffee-houses were directed to be licensed by the magistrates at quarter-sessions.

Coffee cannot be cultivated to advantage in climates where the temperature at any time descends below 55 degrees of Fahrenheit's scale. The trees flourish most in new soils on a gentle slope, where water will not lodge about the roots. In exposed situations it is necessary to moderate the scorching heat of the sun by planting rows of umbrageous trees at certain intervals throughout the field.

The trees begin bearing when they are two years old; in their third year they are in full bearing. The aspect of a coffee plantation during the period of flowering, which does not last longer than one or two days, is very interesting. In one night the blossoms expand themselves so profusely as to present the same appearance which has sometimes been witnessed in England when a casual snow-storm at the close of autumn has loaded the trees while still furnished with their full complement of foliage. The seeds are known to be ripe when the berries assume a dark red color, and if not then gathered will drop from the trees. The planters in Arabia do not pluck the fruit, but place cloths for its reception beneath the trees, which they shake, and the ripened berries drop readily. These are afterwards spread upon mats and exposed to the sun's rays until perfectly dry, when the husk is broken with large heavy rollers made either of wood or of stone. The coffee thus cleared of its husk is again dried thoroughly in the sun, that it may not be liable to heat when packed for shipment.

The method employed in the West Indies differs from this. Negroes are set to gather such of the berries as are sufficiently ripe, and for this purpose are provided each with a canvas bag having an iron ring or hoop at its mouth to keep it always distended, and this bag is slung round the neck so as to leave both hands at liberty. As often as this bag is filled, the contents are transferred to a large basket placed conveniently for the purpose. It is the usual calculation, that each bushel of ripe berries will yield ten pounds weight merchantable coffee.

In curing coffee it is sometimes usual to expose the berries to the sun's rays in layers, five or six inches deep, on a platform. By this means the pulp ferments in a few days, and having thus thrown off a strong acidulous moisture, dries gradually during about three weeks: the husks are afterwards separated from the seeds in a mill. Other planters remove the pulp from the seeds as soon as the berries are gathered. The pulping mill used for this purpose consists of a horizontal fluted roller, turned by a crank and acting against a moveable breast board, so placed as to prevent the passage of whole berries between itself and the roller. The pulp is then separated from the seeds by washing them, and the latter are spread out in the sun to dry. It is then necessary to remove the membranous skin or parchment, which is effected by means of heavy rollers running in a trough wherein the seeds are put. This mill is worked by cattle. The seeds are afterwards winnowed to separate the chaff, and if any among them appear to have escaped the action of the roller, they are again passed through the mill.

The roasting of coffee for use is a process which requires some nicety; if burned, much of the fine aromatic flavor will be destroyed, and a disagreeable bitter taste substituted. The roasting is now usually performed in a cylindrical vessel which is continually turned upon its axis over the fire-place, in order to prevent the too great heating of any one part, and to accomplish the continual shifting of the contents. Coffee should never be kept for any length of time after it has been roasted, and should never be ground until it is required for infusion, or some portion of its fine flavor will be dissipated.

The quantity of coffee consumed in Europe is very great. Humboldt estimates it at nearly one hundred and twenty millions of pounds, about one-fourth of which is consumed in France. Since the time when this estimate was made, a vast increase has been experienced in the use of coffee in England. This was at first occasioned by the very considerable abatement made in the rate of duty, and the public taste has since been continually growing more and more favorable to its consumption.

Bend straw round peach trees, tie it with twine to the tree, about 16 inches long, to prevent worms penetrating the bark.

Sow timothy seed in the fall, and clover in the spring, when land is rather dry.

Agricultural Calendar.

Although I may be considered uncourteously late in acknowledging the receipt of my election as a corresponding member of the Cincinnati Horticultural Society, I shall not now pretend to apologize for the delay, however successful I might be in acquitting myself of negligence. My present object is—first, to express my gratification at finding that the Society is about to act upon the suggestion of D. Lapham, to collect meteorological tables from various latitudes in the Mississippi Valley; and secondly, to second his attempt, by offering to your body a series of notes on the weather, associated with horticultural observations, made from the year 1823 to the present day of 1844.

Memorandums of the state of the atmosphere, and of passing events, are considered of little utility at the time the records are made; but they become more desirable, as the facts glide beyond the reach of recollection, and increase in value as they increase in age.

My early notes are exceedingly scanty; and, if it was not that they are the *only* ones which will perhaps ever be found, for this section of country, for a period so long past; and that they furnish a few rare points for comparison with my records of later date, they would not probably deserve your attention. They reach back no farther than 1823, because, prior to that time, my residence was in other latitudes. They are imperfect, for they were the desultory records of my boyhood; the register of more recent times is, as you will hereafter discover, much more ample, exact, and pertinent.

1823. 11th month.—The uniform price of wood, 37½ cts. a cord. 12th month.—Townspeople complain that wood has risen to 50 cts!

1824. 1st month.—Very mild weather for winter. 2d month.—First week quite cold. 3d month.—14th, snow; 18th, warm; began to dig a cellar in an open lot, the ground being unfrozen. 4th month.—Throughout a very rainy month. 5th month.—Also a rainy month; In the first week, dogwood (*Cornus florida,*) in bloom. 6th month.—First week, frost; and middle of the month cool; 29th, uncommonly hard in, and loud thunder at night. 7th month.—First and second weeks, cloudy, with heavy rains. 8th month.—First week, cool. 9th month.—Ice on the 9th. 10th month.—Very hard frost on the 15th; snow on the 28th. 11th month.—I find no record in this month. 12th month.—Eight or more rains; last week, spring-like weather. Orchards fruitful this year.

I introduce here an agricultural price current, that a comparison may be made hereafter with later ones, and that it may be seen what articles have remained nearly stationary in value, and what have varied with the improvement of the country:

Apples, dried,	$1 25 to 1 50	a bushel.
Bacon,	2 to 3	a pound.
Beans,	25	a bushel.
Beef,	1½ to 2	a pound.
Beeswax,	25	"
Butter,	6	"
Corn,*	12½	a bush.
Chickens,	50	a dozen.
Eggs,	2 to 3	"
Flour,	1 25 to 1 50	per cwt.
Peaches, dried,	1 25 to 1 50	a bushel.
Pork,	1 75 to 2 00	per cwt.
Potatoes,	25	a bushel.
Sugar, (maple,)	4 to 6	a pound.
Tallow,	5	"
Turnips,	12	a bushel.

Flax was then a common article of merchandise; but for years past it has been very scarce.

1825. 1st month.—Seventeen days marked "pleasant" and "warm;" one rain. 2d month.—Ten pleasant days; one snow; fifteen rainy days; four windy—16th, frost: marked "muddy month." 3d month.—Very muddy; eight rains; fifteen pleasant days—28th and 29th, frost. 4th month.—Mostly pleasant; 29th, hail. 5th month.—Sixteen days rain, latter part of the month. 6th month.—Last days marked "pleasant." 7th month.—18 fair days; eleven heavy thunder showers; ten winds from the west and south-west; one from the north. 8th month.—Nine rains; 13th, therm. 98 deg. at noon, in the shade; 10th, windy, with incessant lightning and thunder; three strong winds. 9th month.—Mostly cool; four rains; two windy days; ☞ wheat, 30 cts., "in goods." 10th month.—Dug potatoes on the 14th; constant north wind on the 16th; the comet Encke visible; pulled a fine, ripe, *early* Mayduke cherry! the tree small, and set out this year; first five days warm; 15th, rain storm; 17th, frost; 19th and 29th, snow.

* This appears to have been the price of corn, at the West, so long ago as 1786; flour and pork being at that time $2 per hundred weight, at the Falls of Ohio. An interesting item in the history of western corn crops may be introduced here. In 1790, while corn was abundant at Fort Steuben, great distress existed at Vincennes, from the destruction of the preceding year's crop; and, for three successive years before, extraordinary inundations of the Mississippi totally ruined or prevented the planting of the crops; and, in 1789, an untimely frost destroyed the corn, producing at Cahokia and Kaskaskia a total want of provisions.

11th month.—Three rains; ice on the 7th; strong wind on the 6th; 22d, dug turnips. 12th month.—No record.

Peaches and apples rare this season.

The assessment of this year, shows horses 2659, and oxen 356, in this county.

1826. 1st month.—Second week, comfortable without fire; 24th, therm. 10 deg. below zero; 25th, 3 deg. below zero; highest noon temperature, 62 deg.; average noon temperature 34 deg.—five rains; seven snows, in all not more than six inches deep. 2d month.—No record. 3d month.—Fifteen rains; two snows—highest noon heat, 70 deg., lowest, 32 deg., average, 53 deg. 4th month.—Seven rains—on the 9th, snowed nearly all day and night; and the 10th was cold and blustering—this snow and reduced temperature extended from Washington to Detroit; 82 deg. highest temperature, 66 mean noon heat—29th, peach trees in full bloom. 5th month.—Last two days cool. 6th month.—"3d, the army worm still continues its ravages in the neighborhood, cutting down many akers* of grass and grain. 7th month.—Latter part, very warm and dry. 8th month.—19th, excessively dry weather, for four weeks past; pastures so arid that "scarce a chirping grasshopper is heard;" woods drooping—fears entertained that the fruit and corn have been seriously injured by the drought. 9th month.—Flaxseed 37½ cents a bushel. I have no notes for the remainder of this year; but it appears by the Public Leger, then printed here, that the excessive drought did not destroy the grain or fruit, nor prevent a beet from acquiring a circumference of nineteen inches, and weight of ten and a half pounds, nor a turnip from swelling to a circumference of twenty-nine inches! Fruit abundant.

1827. 1st month.—Latter part of the month, very cold. 2d month.—Part of it 10 deg. below zero. 3d month.—Last of the month, peach trees in bloom! 4th month.—Currants as large as peas; apple trees in bloom; late in the month, dogwood, (*Cornus florida,*) in flower—under date of the 14th, I find it stated in the Public Leger, that peaches are "principally destroyed in this neighborhood." 5th month.—2d, clover in blossom; 6th, peaches which escaped the early frost of last month, now as large as hazel nuts; and cherries the size of a pea—some time in this month, currants mostly killed. 6th month.—No memorandum. 7th month.—Currants spared by the cold of 5th month all gone. I find no horticultural registers for the subsequent months of this year, and but few references to the weather.

Apple trees fruitful. Very few peaches.

Horses in the county, 2909; oxen, 276; see the year 1825—there appears to have been an increase of horses, but a diminution of oxen, since that period.

1828. Most of the large blanks in my note books, for the past years, are due to my absence from home for several months at a time; and the same reason accounts for the omission of any record for this year, until 5th month.—1st, when the woods were generally pretty green; 7th and 8th, ice—during the month, two foggy days; eight rains; four stormy winds; and, on the 28th, there was a great hail storm, with a south wind and rain; some of the hail stones weighed thirty-eight grains. 6th month.—There were fifteen rains—3d, therm. 88 deg.; 15th fierce lightning; 23d to 25th, therm. ranging from 90 to 100 deg.! 7th month.—First week, farmers harvesting; part of the week, *fires comfortable!*—six rains; two fogs; two winds—24th, coriander seed ripe, spontaneous growth. 8th month.—Seven rains, two of them constant for a day and night; one foggy day; and a number marked "cool." 9th month.—1st, cool and rain. 10th month.—13th, windy—the air filled with dust, and in the afternoon, the dust and smoke so dense as to obscure objects at a very short distance; the sun could be viewed as comfortably as through a well smoked glass; 15th, ice; 18th, balmy; 19th, air moist, and so smoky as to pain the eyes, and totally obscure objects at the distance of a few rods; retreat is impossible, as our houses, cellars, &c., are filled with the smoke; 20th, still smoky; 21st, smoke vanished—13th, woods generally faded—two rains. 11th month.—6th, heavy frost; 13th, snow—four rains; two snows; one hail storm; one windy day. 12th month.—Three rains; and three windy days—the middle of the month, cold; 18th, down to 18 deg.; and, for several days, pigeons (*Columba migratoria*) flying eastwardly in immense numbers; 19th, pigeons still passing in astonishing streams; 20th, pigeons, "and still they come;" 24th and 26th, pigeons innumerable.

This year, one of our early nurserymen advertises "cultivated" trees at 6¼ cents, and "natural" trees at 3 cents each. And a few weeks before harvest, a merchant offers 40 cts. "in store goods" for wheat.

Horses in the county, 3847; oxen, 265.

Since penning the above for 1828, I have obtained information from other sources, respecting the first months of the year. The winter of 1827—8 was so open and rainy as to have been designated "the wet winter." And 3d month.—20th, peach trees were in full bloom! And in 4th month, the Public Leger states, that to that time "the spring has been unusually mild and pleasant. Vegetation is about ten days earlier than it was last year." In the early part of the 4th month, however, snow fell to the depth of an inch and a half, bending the limbs of the yet blooming peach trees. Apple trees fruitful; peaches were rare.

More hereafter, if acceptable.

Richmond, Ia. JNO. T. PLUMMER.

* Webster's orthography.

For the Western Farmer and Gardener.

On the Culture of Silk.

Errata.—Page 200, last column, 18th line from bottom, for 100 read 160.

Messrs. Editors:—I wish to call the attention of your readers, particularly those who feel an interest in the subject above mentioned, to a plan of feeding frames, which I think preferable to boards, as mentioned in my last, the description of which is as follows: These frames are to contain the same number of square feet as the boards before mentioned, divided and arranged as convenience may suggest. They should be made of slats of sufficient strength, nailed together, of any convenient width—say, about two and a half feet, by five feet, or any other suitable length. On the under side of these frames, are to be securely nailed the common laths, about six or eight inches apart, on which lay or spread rye or wheat straw, (rye is to be preferred,) at each end of which, and on the top, nail a lath through the straw to the bottom lath, in order to keep the straw firmly to its place. These frames are to be supported upon cross pieces fastened to upright posts, placed at distances suitable to the length and width of the frames.

For the purpose of hatching and feeding the worms until they pass the third moulting, lay the eggs and the young worms on sheets of paper spread on the straw. Keep the litter from accumulating too much under them, by clearing it away once or twice, until they pass the period above mentioned; then place them on the straw, feed with branches, and clean immediately after passing the fourth moulting; and, between this and the time they show signs of rising, by ceasing to eat, crawling about, and raising their heads as if they were looking for something, place brush, without leaves, along the centre of the shelf or frame, and straw cut of suitable length, set up on end about eighteen inches apart—the lower end of the straw to be placed on the outer edge of the frame in parcels of about forty or fifty straws spread out a little at the bottom, and the top of the straw leaning inward on the brush.

April 19th, 1844. A CINCINNATIAN.

P. S. I think favorably of cradle feeding, invented and used by John W. Gill, Esq., of Mt. Pleasant, Jefferson county, O.

Jerusalem Artichoke.

Heleanthus Tuberosus.

From the fact that many enquiries have been made of late, in relation to this very remarkable and useful plant, I am disposed to speak a few things of its culture and uses. The Jerusalem Artichoke is a native of the warmest parts of America, and of course was unknown in Europe till after the discoveries in this country by Columbus and his coadjutors. Since that time it has been cultivated to considerable extent on the continent as well as in Great Britain, but the reports of its profits have considerably varied in that as well as this country. In the old world, some have cultivated it to afford shade to the game; others have converted the stocks and leaves into fodder for cattle, and others, again, have encouraged its growth for the tubers alone. In this country, there are two important objects to be kept in mind in raising artichokes: 1st, The improvement of land; 2dly, The use of the tubers. However, the first matter is the cultivation, and I begin with—

1. *Soil.*—Almost any kind of land will produce artichokes, and it is remarkable that they will grow in the shade, that is, under trees, or in fence corners, very well indeed. Land, however, with a tolerably good sandy mould, will give the most abundant crop. Low, wet soils, and very tenacious clay, are not so suitable.

2. *Preparation of Land.*—The ground should be broken as for corn, that is to say, one good, deep ploughing, and a thorough harrowing, will answer the purpose admirably.

3. *Laying out.*—Rows laid off four feet each way, with a bull's tongue or shovel plough, in most soils, will be the proper distance.

4. *Quantity of Seed.*—From four to five bushels will be required to the acre, and unless the long roots are broken to pieces of three or four joints, or eyes, each, this quantity will not be enough.

5. *Manner of Planting.*—Drop one root at each cross of the plough, and cover from one to two or three inches with a harrow, hoe or plough.

6. *Cultivation.*—So soon as the young plants appear, run round them with a culti-

vator, harrow, or light plough, to destroy the young weeds, and loosen the earth. Keep the ground free of weeds and open to the influence of the atmosphere, till the plants are about three feet high, when they should be laid by, by the use of a cultivator; or, in the absence of a cultivator, and when the land has been ploughed, the harrow should pass both ways to leave the ground loose and the surface level. Generally, about the same cultivation given to corn will answer well for artichokes.

7. *Digging*—This is the most troublesome job in the management of this crop; and if the hoe is the dependence, the labor will be very tedious. The better plan is to lay off a land as for breaking up the ground, so soon as the frost has killed the under leaves of the stocks. The plough should run from 6 to 9 inches deep, and let the hands, big and little, pass directly after the plough, to pick up, that none of the roots may be covered by the next furrow.

8. *Yield.*—The produce to the acre is variously estimated from 500 to 1000 bushels, and it is probable the turn out on medium land would be nearer the latter than the former.

9. *Uses.*—In England and other parts of Europe, the tubers have been considered quite a delicacy for man, and without doubt they make the most beautiful pickles. But their chief importance, in this respect, is their use in feeding hogs. From the middle of October to the middle of November, the hogs may be turned on the artichokes, and with salt always in troughs to which they can have access, they will grow and thrive till next spring, particularly if the ground is not hard for rooting. I have not experimented to ascertain the quantity of hogs to the acre of good artichokes; but from the observation of two seasons, I am of the opinion twenty head will do well on an acre for four months. As some have complained their hogs would not root after them, it may be necessary, as hogs, like men, know not much before learning, that they be taught to root after them. This is done by calling the hogs after a plough that will throw out the roots, till the grunters learn their habitation, which will require but a very short time.

10. *Improvement of Land.*—As the stocks grow from ten to fifteen feet in height, and with thick porous foliage, much of the food of the plant is received from the atmosphere, and thereby the soil is not so heavily taxed as by other crops; the ground is protected from the killing rays of the sun, and the stock and leaves fall and rot very soon. These advantages, with the manure from hogs, afford the cheapest, and amongst the richest coats in my knowledge. It is my conviction, (in the absence of long experience,) that artichokes in summer, and hogs in winter, will enrich our poor lands cheaper and much better than upon any other plan. To be sure, a farmer cannot have all his land in artichokes, but every one should have enough to support his hogs through the winter, and I venture those who give this crop a fair trial will reluctantly abandon it.

11. *General remarks.*—A few farmers of my acquaintance have informed me, that they have succeeded with corn and artichokes together, and it is probable this will prove a successful mode of cultivating these two crops, but on the system of "one thing at a time," we would prefer each crop separately. Some have supposed the second year's growth on the same ground would be more valuable than the first; but this is a mistake. The plants grow so thick the second year, that not more than half a crop can be anticipated. It might answer, to plough out rows and cultivate the second year; but the practice of putting artichoke lands in something else the second year is the plan I most prefer.

Amongst the arguments which might be used in favor of this crop, it should not be forgotten that there is no labor of digging, but for seed; that more troublesome weeds and grasses are completely smothered out; and last, but not least, the young plants, the second year, are more easily subdued than almost any weeds known. Take artichokes all in all, I think them worthy the attention of every farmer who wishes to enrich his lands, or raise his pork with a small outlay of grain.

[*Tenn. Agriculturist.*

Roots for Medicinal Purposes.

In a communication recently made by Dr. Houlton, he states that all roots should be taken up at the time their leaves die, as they then abound with the proper secretions of the plant. This rule has no exception; it applies to the roots of trees, shrubs, herbs, root-stocks, bulbs, eormi, and tubers; and it includes that curious plant, colchicum, whose flowers only appear in the autumn, and its leaves and fruit the following spring and summer. Biennial roots must be taken up in the first year of their duration, as when the leaves decay in the second year, their roots are either decayed or merely dry woody fibre. Roots intended to be preserved should be dried as soon as possible after they have been dug up; the large tree roots, especially the more juicy, dry better in their entire state than when sliced.—*Medical Gazette.*

Apply soapsuds to melons, squashes, and cucumbers, or to any plants infested with the plant louse.

Training for Fruit.

It is a very general complaint, that thrifty, fine trees, either do not flower, or that they do not set their fruit. A few hints of the methods resorted to, to remedy this, may lead to some good result. Mr. Knight's theory was, that the true sap which formed the fruit buds was the descending current. Mr. Lindley takes the same view; and, that the more sluggish the flow of sap, the more of these buds were formed. This seems to be true, beyond a doubt; for almost every person has had this experience, that an old, diseased, or injured tree, will, in the year before its death, produce an abundant crop of blossoms or fruit. The thing to be done, then, is, to retain the sap in the branches as long as possible, without doing injury to the tree. This seems, by exposing the juices longer to the action of the sun and air, to thicken and ripen them, till they reach the state when fruit buds will be formed. If it is desired to make the flowers set their fruit, or to have it ripen well, some one of the methods mentioned below should be put in practice while the tree is in flower; if to form buds for the next year, the same should be done in June, July, or August, when the leaves are in their most vigorous action.

Trees may be made productive, by grafting free growing kinds into those which are slower—as the pear on the quince, the plum on the wild plum, &c. In these cases, the check given to the descending current will cause the graft to overgrow the stock, and a swelling will form just above its insertion. This is a sufficient indication that the retention of the sap in the upper part of the tree is brought about by this means, and, without doubt, its early fruitfulness is the result. It will be proper to say, that trees grown in this way are dwarfish, and not so long lived as when on free stocks; also, that they should be grafted near the surface of the ground, or just below it, as the top otherwise will blow about, and might, from its weight, crack and break the stock.

The most common way of producing fruitfulness, is to bend down the branches to a horizontal position, and fasten them to a wall or frame. In this case, the top should not be suffered to grow, or the ascending sap will all tend there, and the laterals will be weak and worthless. In the last number, there are some remarks upon the proper way of pruning, when trained in this way.

Another plan is, to bend the branches downward, by hanging to the end of each a stone or weight, or by tying them to stakes put into the ground. Trees may often be trained into very pleasing forms in this way. Sir Joseph Banks was in the habit of training the branches of some varieties of pears from the laterals, perpendicularly downwards on the wall, and excited much attention and curiosity, besides getting more and better fruit. The torture of these poor trees is almost as bad as the baking of the Jockey-boys, to keep them little; they twist the branches intended for fruit, of some varieties, so that they are nearly broken off, and hang pointing downward. They shorten in the tops and the roots; by shortening the ends of the branches, the flow of the sap is made less direct, and consequently is retarded. They ring the branches, that is, take off the bark all around the limb, from one-sixteenth to one-half inch in width, so that, for a time, or wholly, the circulation is stopped—if the wound does not grow together in the course of the season, the branch dies. This is an experiment that should be made with care, and, in most cases, the result will be arrived at nearly or quite as well by tying a piece of tape, or other band, very tightly around the limb.

C. W. E.

Walnut Hills Nursery, April, 1844.

Manure.

Haul loads of loam into the farmyard, after the manure has been removed to the field, in order to form the foundation of further riches the next season.

Cincinnati Horticultural Society.

March 16th.—The meeting on Saturday was fully attended. Mr. Buchanan, the President, in the chair. It being suggested by Mr. Chase, that some doubts may be entertained whether there is any personal liability imposed on the members, by the Charter granted by the Legislature, it was moved by Dr. Flagg, and seconded by Mr. Anthony, that the vote rejecting the Charter be reconsidered. After some discussion between Messrs. Chase, Ernst, Graham, Anthony, and Ewing, the motion was amended by appointing a Committee (by the Chair) to inquire into the expediency of reconsidering the subject of rejecting the Charter. The Chair named Mr. S. P. Chase, Geo. Graham, Dr. Stephen Mosher, A. H. Ewing, Dr. M. Flagg, John Frazer, and J. G. Anthony.

A motion was made by Mr. A. H. Ernst, to merge the two Committees on the Synonymes and on the Characters of Fruit into one, which was rejected.

Mr. Ernst declined the office of Chairman of the Committee on Synonymes of Fruits—accepted. Dr. Wm. Smith was appointed to fill the vacancy.

Dr. W. B. Camberlain, of Warsaw, Ky., sent a specimen of an apple raised in that quarter, thought by some to be the Rockrimmon. It is of a pale, yellowish-green color, and keeps till September.

Mr. Geo. Graham was elected 3d Vice President to fill the vacancy occasioned by the resignation of Mr. Ernst.

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March 23d.—At this meeting the following gentlemen were admitted as members: J. F. Waring, and Abel S. Light, Columbia, O. Jos. Chambers, Covington Ky. T. V. Peticolas, Mt. Carmel, Clermont Co. O. James Saffin, and Wm. N. Pearson, Cincinnati.

Mr. Abraham Hite, of Louisville, Ky. was elected a Corresponding Member.

On motion of Mr. Ernst, the Committee on the Charter was continued another week, and Nathaniel Wright, Esq. was added to the committee

A bundle of grafts of a valuable Pear was received from Dr. Hildreth of Marietta, and distributed. Also grafts of the Canfield Apple, by Dr. Smith.

The box of Guano, from South America, presented by Mr. S. W. Pomeroy, last week, was also distributed.

Dr. Warder announced that some seeds from Petersburgh, Va. would be distributed at the next meeting.

A truly magnificent plant of the Azalea purpurea, with upwards of 400 blossoms, each of the size of a dollar, was exhibited by Mr. Schnetz. It made the most imposing appearance of any thing yet exhibited by the Society. A fine specimen of the White Hibiscus was also presented by Mr. Ewing—the Pryor's Red Apple and Tolman's Sweeting by Mr. Mears—and a new Apple by Mr. Jacob S. Lumley, of Madisonville.

The following communication was read from N. Longworth, Esq:

To the Members of the Cin. Horticultural Society.

GENTLEMEN,—I discover that Mr. Hovey, in a late number of his Horticultural Magazine, has "*fallen from the faith*," and no longer believes in the doctrine of male and female strawberry plants, (staminate and pistillate) and *repudiates* the doctrine, that male plants are necessary to make the female plants bear fruit, influenced by the principle, no doubt, that the strawberry belongs to that class of plants, which have the male and female organs perfect in the same blossom, (which is true.) But in all the species I have seen, (except the White and Monthly,) the male is defective in one set of plants, and the female in another; and in many of the finest and largest kinds it amounts to a complete separation of the sexes. In some, the male plants produce more or less fruit; but I know no kind, where the fruit is large, that the female will bear perfect fruit without the male. Where both organs are perfect in *all the blossoms*, the fruit is always small, as far as my experience goes. I hold, that female (pistillate) plants, of the following varieties, will not, without male (staminate) plants near them, bear perfect fruit, and that about *one* male is necessary to *ten* female plants, to wit: Hovey's Seedling—Hudson—Necked Pine—Methven Castle—Warren's Seedling Methven—Mottier's Large Seedling—Keene's Seedling—Mammoth, and some others.

If I am right in my belief, every cottager, who has 30 feet square of ground to spare, can raise more strawberries, by having both male and female plants, than his family can use, and that all his attempts will prove abortive where this is not attended to. Where a Magazine of the standing of Mr. Hovey's, holds the contrary doctrine, the declaration of a single individual has little weight. To put this question at rest, I request you will appoint a Committee of twelve from your Society, with your President at its head. Let them now carefully plant the whole, or a part of the above stated varieties, in a department by themselves, and the like kinds, some 50 feet from them, with a few of the Iowa male near them, and three or four weeks will settle the principle. Let one half of the members of the Committee be intelligent botanists, and the other half practical Gardeners, who raise the strawberry for market.

Respectfully, N. LONGWORTH.

The following gentlemen were appointed a committee to test Mr. Longworth's theory, viz:

Jacob Hoffner,	David Ross,
A. H. Ernst,	Thos. G. Lea,
S. S. Jackson,	J. G. Anthony,
A. H. Ewing,	D. N. Smith,
Dr. S. Mosher,	George Graham,
C. W. Elliott,	R. Buchanan,

Mr. Elisha Brigham, R. Buchanan, and George Graham were appointed a committee to procure a suitable room for the use of the Society.

Mr. R. Buchanan, A. H. Ewing, and Elisha Brigham, were appointed a committee on investing the funds of the Society.

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March 30th.—The meeting was attended, notwithstanding the tempestuous weather, though there was not much business to be brought before the members.

The Committee for obtaining a room for the Society, reported, that they had not been able

to find one that suited them, and asked for further time, which was granted.

The Committee on examining the provisions of the Charter, reported, that they had not been able to attend to the subject from unavoidable causes. After some discussion between Mr. S. P. Chase, N. Wright, A. H. Ewing, E. B. Reeder, and A. H. Ernst, it was voted, that they have another week to examine the subject, and report at the next meeting.

The following gentlemen were elected members :

Rowland Ellis, John L. Patterson.
David Griffin,

Mrs. Walker Yeatman presented a specimen of the Vandevere apple, and a bottle of Raspberry Wine of domestic manufacture—the latter considered a very delicious beverage, having a high flavor of the Raspberry.

Mr. S. W. Pomeroy presented a bunch of scions of the Pine Apple pear, (the Poir d'Ananas, of eastern nurseries.) Specimens of this fruit were exhibited at the shows of the Society last fall. It is of medium size, very handsome, and melting, with a fine pine apple flavor. It ripens in October and November, and is considered in Belgium as one of their very best kinds.

Mr. R. Buchanan exhibited a specimen of the Fritillaria meleagris, a new and very pretty bulbous root, that flowers thus early. It is perfectly hardy, and often pushes up its delicate blossoms through the snows of March and April. This is thought to be the first time this has blossomed in this quarter.

On motion of Dr. Flagg, it was resolved, that delinquent members be called on for their initiation fee—and that the names of such as do not pay by the 1st of May next, be stricken from the list of members.

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April 6th.—The meeting of this day was the largest of the season. Dr. Flagg in the chair, in the absence of the President.

The Committee on the Charter reported, that they had examined its legal provisions carefully, and find they included the personal liability of the Managers, at least, of the corporation, to pay its debts. By another provision, it is liable to be altered, suspended, or repealed by any future Legislature, which would take away all security to the rights and interests that may be involved under the Charter, and which, with the personal liability, may occasion embarrassment in the management of its affairs. They, therefore, recommended that the Society, at present, decline to accept the Charter, which was adopted.

The seeds from Russia, presented by Dr. Ridgely, were referred to a committee (Messrs. Hoffner, Sleathe, Jackson, and Sayers,) to examine their character and arrange them for distribution next Saturday.

Committee on Hall for the Society, were authorized to engage the Amateur Musical Hall, (late Assembly Rooms,) at a rent not exceeding $100 per annum, for the use of the Society.

Mr. S. P. Chase suggested the importance of the Society's taking in hand the business of establishing and embellishing a Rural Cemetery in the vicinity of the city, on the plan of that at Mt. Auburn, near Boston. He added, that no Society could do it with so much propriety—that the public expected them to go forward in the matter; and added his confident belief that a large number of citizens would promptly and efficiently come forward to support the enterprise, by the purchase of lots.

Mr. Buchanan stated, that the subject had been before the members, and had occupied his attention for some months—but had been delayed with the expectation that a suitable charter could have been obtained, under which the business could be more conveniently managed. He added his belief, also, that the project would be favorably considered by the public. After some conversation between several gentlemen, Mr. N. Wright and Mr. S. P. Chase were added to the Committee on establishing a Cemetery.

Mr. Ernst, Mr. Frazer, and Mr. Russell were appointed a Committee to revise the constitution, by-laws, list of members, &c., with reference to publication in a pamphlet.

Scions of the Prior Red, and Tallman's Sweeting apple, and cuttings of the White Dutch Currant were distributed.

Judge Wood presented cuttings of a native grape from the vicinity of Lake Erie, which were ordered to be planted out with the Society's standard trees.

Mr. Hoffner, as usual, exhibited a few gorgeous flowers, viz., the Tropeolum tricolorum, Iris susiana, Cineraria kingii, and C. fisherii.

Mr. Ernst presented from A. McGregor, of Terre Haute, Ia., a bundle of scions of ten leading apples of Illinois and Indiana.

Mr. Wm. Resor exhibited the Jo Berry apple, a valuable fruit for cooking and eating, that is in season from the middle of November to the middle of May.

Mr. R. Neale, of Mt. Carmel, Clermont co., exhibited splendid stalks of the English Giant Rhubarb, that was much admired, and was the first that we have noticed this season.

Mr. Anthony presented the Lady apple, or Pomme d'Api, that has been a favorite apple in France for two hundred years.

Mr. V. B. Horton, of Meigs co., O., Mr. Wm. Hudding, of Cincinnati, and Mr. Peleg Kidd, of Covington Ky., were admitted subscription members; and Lieut. Charles Jeffries, R. N., of London, a corresponding member.

Red Beets are said to be equal if not superior to rhubarb for pies—and they possess the advantage of keeping though the winter.

Floral Calendar of Native Plants, for May---at Cincinnati.

BY T. G. LEA.

The first three weeks of the last month (April) have been remarkable for their warmth; the average temperature to the 21st, being 65°, and the thermometer, in the heat of the day, varying from 70° to 86°, excepting the first day of the month, when it was not higher than 60°. This unusual heat, occurring with a sufficient supply of moisture, in the form of rain and dew, has excited vegetable life into the most vigorous and luxuriant growth. By the middle of the month, the forest trees wore a green look; and, at the end of it, will be densely clothed with fully expanded leaves. The more humble plants that grow at their feet, and are protected in their shade, have also sprung into early existence, and are opening their variously colored petals. Some that are now familiarly described have flowered in April, but may be found in bloom in the first part of May. Others are rapidly developing, and perhaps all will be in flower by the middle of the month.

TRILLIUM ERECTUM.—The stem is twelve to eighteen inches high, with three large leaves at its top. The leaves are somewhat round, broadest across the middle, ending in an abrupt acute point, and without any footstalk. A solitary peduncle, two to four inches long, arises from the bosom of the three leaves; sometimes it is nearly erect, or more or less inclined, or even bent down under the leaves, and bearing a flower consisting of three outer green calyx leaves, and three inner spreading petals, which are commonly white, or sometimes purple. Grows in shady, rich woodlands, and is not uncommon. It is a handsome plant, and succeeds in the garden.

STAPHYLEA TRIFOLIA. *Bladder Nut.*—A woody plant, four to six feet high. The leaves are in threes, on long footstalks, and are finely serrate. The flowers are in pendulous racemes, having a five-parted calyx, and five white petals. The seed vessel is about an inch in diameter, and nearly twice as long, membranous and inflated. On the top of the second hill below Millcreek, and on the margin of streams. Not frequent.

ASARUM CANADENSE. *Wild Ginger.*—Root creeping and fleshy, spreading near the surface of the ground. Stem very short, bearing two leaves which are broader than long; deeply cordate at base; on long petioles. The flower is on a short peduncle in the fork of the petioles, often resting on the ground or dead leaves; of a purplish brown color. Grows in rich woodlands or copses, frequent. It commonly occurs in small patches with the roots matted together. It may be readily known by the aromatic taste of the root, which is a good substitute for ginger.

DODECATHEON MEADIA. *Pride of Ohio—False Cowslip.*—Stem ten to sixteen inches high, erect, simple, without leaves except at the base. The leaves are a long oval shape, tapering at the base; the margin entire; four to five inches long; seated at the base of the stem, without footstalks. The flowers are from twelve to twenty, in an umbel or cluster at the summit of the stem, on peduncles about two inches long, recurved or bent down, the corol being five-cleft, the segments reflexed or bent back, the color white, or often various shades of purple. The peduncles have a curious property of changing their direction at three different times; at first they are erect, but as they elongate, and the bud increases in size, they gradually curve down and become pendulous: in this situation, the flower is opened. Afterwards, as the seed vessel begins to mature, they return to their original position, standing stiffly erect with the ripened capsule. This beautiful plant is now very rare, and will soon be extinct, in a wild state, in this vicinity, being much sought after for the gardens. Some very fine ones were growing in Mr. N. Longworth's garden a year or two ago.

VIBURNUM PRUNIFOLIUM. *Black Haw.*—This shrub, or small tree, grows about twelve feet high, having many branches. The leaves are mostly ovate, smooth, the margin finely serrate, on short petioles. The flowers are small in clusters about two inches across. The corol is white with five spreading lobes. The fruit is black, and very palatable. This is a handsome plant, and is deserving of cultivation, by which, perhaps, its fruit would be improved.

OXALIS VIOLACEA. *Violet Wood Sorrel.*—Root, a scaly bulb. The leaves are on long petioles, and consist of three leaflets, which are broad, and notched at the summit, narrow at their base; often of a purplish color. Flowering stem slender, about six inches long, bearing four or five flowers at its top. The petals are five, of a violet color. Grows in a stiff soil, in woodlands and thickets; frequent.

TRADESCANTIA VIRGINICA. *Spider-wort.*—The stem is thick and succulent, twelve to fifteen inches high. The leaves are about as long as the stem, and clasp it at their base; smooth; the margin entire. The flowers are in a dense terminal cluster, on peduncles about an inch long, which are recurved on each side after flowering. The petals are three, of a bright blue color; the filaments are clothed

with blue jointed hairs. The flowers open but two or three at a time, and soon wither and are succeeded by others. This is a pretty plant, and thrives well in the garden, growing in small close patches. In rich, shady woodlands.

Hydrophyllum virginicum. *Water-leaf.*—The stem is about fifteen inches high, often fork-branched near the base, with a leaf or two at the summit. The leaves are large, pinnately cut into lobes, the lower ones on long petioles; those at the summit smaller, and on shorter petioles. The flowers are in a cluster, on a long common peduncle from the axils of the upper leaves or opposite to them. The corol is five cleft; white or purplish; the filaments are hairy. Grows in shady thickets and woodlands.

Phacelia fimbriata. *Fimbriate Phacelia.*—Stem, twelve to fifteen inches high, with alternate fork-like branches. The leaves are pinnately dissected; the lowest ones on long petioles, the upper ones sessile. The flowers are borne on racemes, two to three inches long, which terminate the branches. The corol is blue, five-cleft, and beautifully fringed on the margin of the segments. The calyx segments are narrow, and hairy. Grows in bottom lands; between the Brighton House and Millcreek, plenty. This is sometimes named here *Miami Mist;* and, when seen in large crowded patches, as it often grows, and its delicate blue flowers expanded, the term is not inappropriate. It is a handsome plant for the garden.

Liriodendron tulipifera. *Tulip Poplar.*—This well known magnificent tree attains a height of a hundred feet or more, with a proportionate diameter. The leaves are smooth, slightly cordate at base, with two side lobes, and a terminal truncate one. The flowers are about two inches long. The petals are six, greenish yellow, stained in the lower half with orange color. The stamens are numerous and long, surrounding the cone-form fruit. When growing in open fields, the branches are often within reach; in the woods, the trunk is naked to a great height. This tree, for beauty and grandeur of appearance, may rank with some of the Magnolias. In the woods, but not very frequent.

Cypripedium pubescens. *Mocasin Flower.*—Root, of coarse, fleshy fibres. The stem is twelve to eighteen inches high, simple, leafy. The leaves are large, sheathing the stem; hairy, nerved, of an elliptic outline. The flower is mostly solitary, terminating the stem, and has four segments of a greenish color with purple stains; two of them are long and curled, the others shorter, and one of them split at its apex. Another part of the flower, called the *lip*, is very different; it is an inch or more long, inflated, with an aperture on its upper side, of a bright yellow, with a few purplish stains inside. It has a very pleasant smell. This belongs to one of the most curious families of plants—the Orchidaceae, often remarkable for the beauty as well as the singular form of some of its species. The sexual apparatus is very distinctive, the stamens and style being united in one column, the pollen consisting either of powdery grains or waxy masses; the stigma is a viscid space in front of the column. The species now described grow in rich shady woods; not frequent. It bears transplanting, and succeeds well in the garden.

Orchis spectabilis. *Priest in the Pulpit.*—Root of coarse, fleshy fibres. The leaves are a single pair, proceeding from the root, about four to five inches long and three to four inches wide; somewhat elliptic, tapering at the base, smooth and thick. Stem rising from between the leaves, six to fourteen inches high, bearing four to eight flowers in a leafy spike. The flowers are a pale blue; the lip is broad, and, with its spur, white. Belongs to the same curious family as the last described. In shady, rich woodlands; not frequent.

Sedum ternatum. *Stone Crop — False Ice Plant.*—This is a small, somewhat creeping plant, with numerous leafy stems. The leaves are smooth, fleshy, roundish, or oblong, without foot stalks; flat; the lower ones in whirls of threes round the stem. The flowers are on three spreading spikes of one to three inches long, at the summit of the stem, and arranged along the upper side of the spikes. The petals are mostly four, white. Stamens, commonly eight, with black anthers. A pretty plant, worth cultivating Grows in shady woods, on rotten trunks, mossy banks, and banks of rivulets; plenty.

Gymnocladus canadensis. *Coffee Tree.*—A tree attaining the height of fifty or sixty feet, with a rough bark, and a few branches sparingly subdivided. The leaves are twice pinnate, having the mid-stem about two feet long, and four to six lateral ones, which bear three to six pair of small leaflets on short foot stalks. The flowers are borne in racemes, in the axils of the leaves. The petals are five; white, a little longer than the calyx. The stamens are ten, inserted with the petals. The fruit is a thick pod of a brown color, four to six inches long, containing several large round seeds. This tree forms a handsome top and has a beautiful foliage, and would be ornamental as a shade tree; preferable to several kinds that are often planted along the side walks. The largest one I have seen is in front of the first house below the mouth of Millcreek. In woodlands; not frequent.

Menispermum canadense. *Moon Seed.*—A climbing vine, ten to fifteen feet long, twining round shrubs, with a somewhat herbaceous stem. Leaves large, broader than

long, obtusely three-angled at the apex, cordate at base; on petioles three to six inches long. The flowers are small, yellowish green; in a compound raceme, on a slender peduncle, inserted a little above the axils of the leaves. The berries are black, containing a single seed, and look like grapes. The staminate and pistillate flowers are on different plants. The root is used as a tonic and alterative. Frequent in thickets and fence rows.

ASCLEPIAS QUADRIFOLIA. *Four-leaved Asclepias.*—Root fleshy, yellowish. Stem twelve to eighteen inches, simple, erect, slender. The leaves are on very short petioles, ovate, accuminate; those at the middle are four in a whorl, the upper and lower ones opposite; sometimes the middle ones are but two, and opposite. There are commonly two terminal umbels, on peduncles two or three inches long, arising from the base of the two upper leaves, bearing many flowers, on pedicels about an inch long. The flowers are of a very curious structure: the corolla is five-parted, the segments bent back on the pedicel; the nectary is five-parted, with its segments erect and hooded, each with an internal horn-like process. In the centre is the crown containing the anthers and styles; the pollen is in waxy masses, in five pairs contained in the cells of the crown. The flowers are white, tinged with purple. Frequent in rich woodlands.

NUPHAR ADVENA. *Yellow Pond Lily.*—The leaves are large and thick, floating on the water or erect; deep green; deeply cordate at the base, the lobes diverging; obtuse at the apex, on long, thick petioles. The flowers are greenish and yellow, consisting of the six outside thick calyx leaves, within which are fourteen small yellow petals. The stamens are numerous; the stigma is a flat disk, a half inch or more in diameter, notched on its margin. At the pond at the mouth of Millcreek.

CHEIRANTHUS HESPERIDOIDES. *Wild Rocket.*—Stem one to two feet high, simple or branched. The leaves are thin, unequally serrate, the lowest ones pinnatifid at their base, the upper ones ovate acuminate, narrowed at the base. The flowers are a purplish blue, small and numerous, disposed in a panicle, on spreading pedicels. The petals are four, cruciately arranged. The seed vessel is an inch or more long, slender. In rich shady woods, frequent.

PEDICULARIS CANADENSIS.—Stem, six to twelve inches high, simple, hairy. The leaves are alternate, nearly half as long as the stem, pinnatifid; the lower ones on long petioles. The flowers are in a terminal leafy head, which elongates into a spike as they expand. The corol is in one piece, two lipped, the upper lip about an inch long, compressed, brownish purple, the lower lip shorter and yellowish. In dry thickets and woodlands; not frequent.

VALERIANA PAUCIFLORA. *Few-flowered Valerian.*—Stem, one to two feet or more high, slender, and weak; often throwing out long, prostrate, leafy suckers, at the base. The leaves are thin, the margin with shallow teeth; the lower ones on longer petioles, cordate at base, often with several very small lateral leaflets, the upper leaves distant, mostly ternately divided, the two lateral ones smaller than the terminal one. The flowers are in a terminal cluster, sometimes in panicled clusters; the color pinkish, sometimes tinged with blue. The corolla is about an inch long, consisting of a long tube cleft at the summit into five lobes. The stamens and style are longer than the corol. Grows in rich shady thickets, and borders of rivulets.

SYNANDRA GRANDIFLORA.—Stem, a foot to a foot and a half high, erect, hairy, simple, or sometimes branched. The leaves are roundish-cordate, acute at the apex; margin obtusely toothed; the lowest ones small, on petioles two to three inches long; the middle ones larger, on petioles somewhat shorter; the upper ones embracing the stem. The flowers are sessile, in the axils of the small upper leaves. The corolla is about an inch long, dull white, the tube much inflated and narrowed downwards; above, it is separated into two lips, the upper one is entire and arched, the lower is three-lobed, the middle lobe striated with purple lines. The anthers of the two longer stamens cohere by their margins. This handsome plant was originally discovered by Mr. Nuttall, in the vicinity of Cincinnati, where it is now frequent, in rich, shady woodlands.

OSMORHIZA LONGISTYLIS. *Sweet Cicely.*—Root fleshy, somewhat branching, with a sweet aniseed flavor; stem two to three feet high, branching, purple, often clothed with fine hairs. The leaves are compound, the lower ones on long petioles, the leaflets ovate, deeply serrate, shining on the under surface. The umbels are on peduncles, the rays about four, an inch or two long, each ray terminating in a small umbel of four or five rays, which bear the small white flowers. Fruit about half an inch long, nearly black, crowned with the two slender diverging styles.—This plant is remarkable for its sweet flavor, particularly the root. In rich shady

thickets and ravines. It is plenty in a thicket beyond the Brighton House, near the race-ground.

Heuchera Americana. *Alum Root.*—The leaves are all radical, on long petioles, roundish, cordate, somewhat lobed. The stem is two to three feet high, slender, rough with glandular hairs, naked.—The flowers are small, numerous, purplish or white, borne on a slender panicle, six to twelve inches in length—the stamens are longer than the corolla. The root is a strong astringent, and said to be medicinal. Grows on shaded banks and wooded hill-sides.

Work for May.

In this month transplant from the hot-beds cabbage, lettuce, &c. Melons and cucumbers in pots may be turned out in the hills where they are to grow. Seeds for fall vegetables, beets, salsify, &c., should be sown for a crop, if not already done.

Flower seeds should now be transplanted from the hot-bed, and sown in the open ground. Be careful not to cover them too deep. Hoe and rake them early in the morning, and thus keep the surface of the ground loose and open for every shower.

Protect melon plants, cucumbers, &c., from the attacks of insects, by covering them with millionette, sprinkling the ground with sulphur, &c.; try camphor, coal, tar, or any other thing which suggests itself. See to your roses, or the caterpillars will feed on their damask cheeks, and you will have no bloom worth seeing.

In the nursery, go over the young trees, and kill caterpillars and grubs; they are at this time very voracious. Stake or tie up, so that the trees will become straight and saleable. Keep the hoes, ploughs, and cultivators well at work among them—they will grow better for it.

Thin out seed beds, and, above all, keep the ground loose and clean. Water over the tops of newly transplanted trees, with a watering-pot or syringe, especially in dry atmospheres; this is important. Bind up with moist cow dung, wherever bruised; the wound heals sooner and better. Look over strawberry beds, and pluck up the sterile or male plants. Hoe up the males in the alleys, as soon as they are out of flower, or they will spread into the beds.

Keep a note-book, for all curious or unusual facts and appearances; it will be useful to you and others. C. W. E.

To Protect Vines from Bugs.

A subscriber called at our office a few days ago, and communicated to us a fact relative to the destruction of such bugs, or other winged insects, as are injurious to cucumber and water melon vines, &c. He has practised it for several years, and found it very effectual in protecting the plants from the destructive ravages of these insects. The method is as follows:—

Just at evening, he kindles a small fire, (or, if the patch be large, several may be necessary,) that will blaze freely, in some convenient place, where it will not injure the plants. He then, by brushing the plants, alarms the bugs, so as to cause them to take wing, when they fly directly into the fire, and are destroyed.

An experiment of this kind is very easily tried, and we have no doubt it will be found a valuable remedy for these troublesome insects.

From the Atlas.

Watering Fruit Trees.

Messers. Editors:—There is great danger in over-watering. The newly transplanted tree will generally, from its innate vigor, push its leaves well, and until they are fully expanded, retain their freshness: the dry atmosphere of this climate, then calls from them a supply of moisture greater than they are able to furnish, and very often they droop and die. Now when trees get into this state, copious watering of the roots is usually resorted to, which excites them to over-action, followed of course by a corresponding debility. The proper way is to water over the top two or three times a day, with a watering pot or syringe; this keeps the leaves moist, and creates to some extent what our atmosphere is at certain times deficient in. Very respectfully,

C. W. Elliott.

PEARS.

The new and superior sorts added to this important class of fruits have proved most valuable acquisitions. The greater part of them have been obtained from Belgium, and have far exceeded the expectations generally formed of them on their first introduction, especially as regards their adaptation to this climate, in which many, instead of requiring the assistance of walls, as all the best old sorts do, produce abundantly and in great perfection on standards, a property also possessed by many valuable varieties raised by the late Mr. Knight. A knowledge of the excellence of these new kinds, has occasioned a great number of the old sorts, formerly reckoned very good, to be now marked as only second rate in the following list. It is necessary to observe that varieties esteemed of the highest excellence by some, are deemed inferior by others. In general this diversity of opinion is owing to difference of soil, situation, or climate; for, if these are unfavorable, a variety that proves to be firstrate, when produced under favorable circumstances, is often found inferior to one that, although second rate, is more hardy. Where kinds of secondary or inferior quality are marked as table-fruit in the following enumeration, it may be understood as only indicating their having been used as such, and being of a nature rather adapted for that than for perry, or kitchen use.

In regard to situation it may be necessary to state, that those marked as succeeding as standards, are calculated to do so in the southern and midland parts of the kingdom, or even considerably more to the northward in particularly well sheltered places. The abbreviations are as follow:

Prevailing Color. p. pale; d. dark; b. brown; y. yellow; r. red; g. green; rus. russet.
Form. pyr. pyriform; obt. pyr. obtuse pyriform.
Size. 1, large; 2, middle; 3, small.
Use. K. kitchen; T. Table; P. perry.
Texture. C. crisp; B. buttery; J. juicy; T. tender, such as are softer than the crisp, yet not so fine as the buttery.
Quality. 1, first rate; 2, second rate; 3 indifferent or bad.
Situation. W. wall; S. standard.

Names.	Color.	Form.	Size.	Use.	Texture.	Quality.	Season.	Situation.	Remarks.
D'Abondance, see *D'Amour.*									
0 Adam, ...	b. g.	pyr.	2	T.	C.	2	Dec.	S.	
0 Achan, Black, . . .	d.g.b.r.	obovate.	2	T.	B.	2	Nov. Dec.	W.S	Bad from standards in many parts of England, and does not merit a wall.
Black Auchan. Achan. Grey Achan. Red Achan. Winter Achan. Black Bess of Castle Menzies. Winter Buerré, (of some.)									
0 Achan, Green, . . .	g.	obovate.	2		C.	3	Nov. Dec.	S.	
Ah Mon Dieu, see *D'Amour.*									
1 Aigrette, ...				P.					
2 Alberty.									
3 Alexandre de Russie, .	rus.	obovate.	2	K.	C.		Oct.	S.	
4 Alpha, ...	p. b.	obovate.	2	T.	B.	2	Oct.	S.	Good bearer.
0 Althorp, ...	g. b.	obovate.	2	T.	B.	2	Nov.	S.	
0 D'Amande, ...	rus.	pyr.	2	T.	B.	2	Oct. Nov.	S.	
0 D'Amande d'Eté, . .	g. y.	pyr.	1	T.	J.	2	Sept.	S.	
5 Amadotte.									
D'Ambre, see *Muscat Robert.*									
6 Ambrette d'Eté, . .	g. y.	pyr.	3	T.	C.	2	Sept.	S.	
Crapaudine. Rude Epée.									

Names.	Color.	Form.	Size.	Use.	Texture.	Quality.	Season.	Situation.	Remarks.
0 Ambrette d'Hiver, . .	g. b.	roundish. obovate.	2	T.	B.	2	Nov. Jan	S.	
Ambrette.									
Ambrette Grise.									
Ambre Gris.									
7 Ambrosia, . .	g. y.	roundish. obovate.	2	T.	B.	1	Sept.	S.	Delicious, but does not keep long.
Early Beurré.									
Amiral.									
Amiral Musqué.									
8 Amiré Joannet, . . .	y.	pyr.	3	T.	J.	2	July.	S.	
Jeannette.									
Saint Jean.									
Archiduc d'Eté.									
Amoselle, see *Bergamotte de Hollande.*									
D'Ananas, see *Passe Colmar.*									
9 D'Amour, ...	g. y. r.	obovate.	3	T.	J.	2	Sept.	S.	Great bearer.
Ah Mon Dieu.									
Mondieu.									
D'Abondance.									
0 Ananas d'Eté, . . .	b. r.	obt. pyr.	1	T.	B.	2	Sept.	S.	
0 Ange, ...	y. b.	turbinate.	3	T.	J.	2	Sept.	S.	Flesh sugary but not fine.
0 Angélique de Bordeaux	y. r.	obt. pyr.	2	T.	B.	2	Jan. Apr.	W.	
Saint Martial.									
Franc-real Gros.									
Cristalline.									
10 Angelique de Rome, .	y. g. b.	obovate.	2	T.	C.	2	Oct.	S.	
11 Angleterre, ...	b. r.	pyr.	2	T.	B.	2	Oct.	S.	A good bearer as a standard.
Beurre d'Angleterre.									
Angleterre des Chartreux.									
0 Angleterre d'Hiver, .	y. b.	pyr.	2	K.	C.	2	Nov. Mar.	S.	Although this and the two preceding bear the name of this country, they have only been met with in French collections.
Angoisse (Poire d'), see *Winter Bon Chrétien.*									
12 Angora.									
Apothekerbirne, Sommer, see *Summer Bon Chrétien.*									
Archiduc d'Eté, see *Amiré Joannet.*									
13 Archiduc Jean d'Autriche.									
14 Archiduchesse d'Autriche									
15 D'Aremberg Parfait.									
Arménie, see *Double Fleur.*									
Aschrapai Armudi.									
16 Aston Town, . . .	y. g. b.	roundish.	3	T.	B.	1	Oct. Nov.	S.	A good standard pear; bears abundantly.
D'Auch, see *Colmar.*									
Auchan, Black, see *Black Achan.*									
17 Auch Chisel.									
0 Augustbirne, . . .	y. r.	obovate.	2	T.	C.	2	Sept.	S.	
Aurate, see *Muscat de Nancy.*									
D'Austrasie, see *Jaminette.*									
18 Autumn King.									
Autumn New, see *Verte Longue.*									
Avant Fleur.									
19 Avocrat.									
Badham's, see *Brown Beurré.*									

[illegible] Spri[illegible]

[illegible] MURRAY [illegible]

On[illegible] miles from C[illegible]nati, [illegible]

Th[illegible] subscriber would respectfully c[illegible] [illegible] of the public to this Western [illegible] establishment, as [illegible] embracing almost every [illegible] worth [illegible] cultivation in the fruit [illegible]; also in [illegible] ornamental depart[illegible] ment, his stock [illegible] large and [illegible]. Most of his trees, excepting some of the new varieties of the [illegible], and a few sorts of [illegible] apple, are [illegible] and well grown. [illegible] of Cherries is large and of the best size; Trees from [illegible] eight feet high. Catalogues of which [illegible] had on appli[illegible]cation at the Nursery [illegible] letter [illegible] paid.

All orders, (enclosing the cash, or suitable reference,) will be promptly attended to, which may be sent through the Post Office, or on personal application at the Nursery.

Every thing [illegible] distance packed with great care, and [illegible]d in the city without charge.

A. H. ERNST.

DAVI[illegible]ARDS,

[illegible]rin[illegible] Surgeon

[illegible]phia,

Takes this method [illegible] the own[illegible] of [illegible] that he has located himself in Cincinnati, and is prepared to take charge of Cattle and Horses [illegible]ased, and believes [illegible] experience in [illegible] profession will enable [illegible] to give [illegible] to those who may [illegible] him with business. He [illegible] [illegible] that it is the practice of some to [illegible] themselves to [illegible] all sorts of in[illegible] [illegible] diseases; [illegible] his object [illegible] [illegible] settlement [illegible] the establishment of [illegible], he [illegible] entering into [illegible] particular [illegible], and flatters himself his perfe[illegible] [illegible]ance with the proper treatment [illegible] pursue in most cases, will en[illegible] him to be of service to those gentlemen of the vicinity who pri[illegible] a valuable animal, [illegible] [illegible] subject [illegible] [illegible] VETERINARY STABLES, [illegible] Seventh street [illegible]

Nicking, and indeed [illegible] profession attended [illegible] [illegible] and judgment.

C[illegible]nati, Decemb[illegible]

[illegible]H[illegible]VEN[illegible]

ENG[illegible]AVER,

[illegible] Type Foundry,

No. [illegible] STREET,

[illegible]N[illegible]TI.

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SILK MANUFACTURERS,

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Also—Cocoons [illegible] reeled silk manufactured on commission into sewing silk, dresses, handkerchiefs, floss silk, &c., on the most reasonable terms.

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Corner of Fifth and Main Streets—fronting [illegible] Street.

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By the present Proprietor,

JOHN NOBLE.

Cincinnati, February 1st, 184[illegible]

WALNUT HILLS NURSERY,

NEAR CINCINNATI.

This establishment contains [illegible] leading and best varieties of Apples, Pears, Cherries, Plums, Peaches, Apricots, Nectarines, Grapes, Quinces, Currants, Gooseberries, Strawberries, &c.; and the [illegible] new varieties are punctually received as soon as they are tested in the best Nurseries at the East. Every tree has been grafted or budded by the subscriber, and cultivated with the greatest care; great certainty is therefore insured, and every tree [illegible] will be warranted, and sold at the lowest prices.

The expo[illegible] the Nursery is a nor[illegible] [illegible], and the [illegible] moderate richness; this in[illegible] [illegible] a hardy [illegible] healthy tree, which thrives when trans[illegible] [illegible] situations. [illegible] refer[illegible] [illegible], the President of the Hort. Society, and many others.

The trees will be carefully packed and shipped to any part of the country delivered in Cincinnati, free of expense. Orders addressed [illegible] Cincinnati Post office, or left at Mr. Parkhurst's Seed store, will be promptly attended to.

[illegible] CH. W. [illegible]T.

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OF THE
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AND
HORTICULTURAL MAGAZINE.

A monthly periodical, published at Cincinnati; devoted exclusively to Western Agricultural and Horticultural improvement.

Edited by { **Edw. Jas. Hooper,** *a Practical Farmer.*
{ **Chas. W. Elliott,** *a Practical Gardener and Nurseryman.*

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